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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,189	05/23/2006	Hiroyuki Yoshikawa	L9289.06156	1805

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EXAMINER

CLARK, DAVID J

ART UNIT	PAPER NUMBER
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4143

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,189	Applicant(s) YOSHIKAWA, HIROYUKI	
	Examiner DAVID J. CLARK	Art Unit 4143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>23 May 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. This action is in reply to the application filed on 23 May 2006.
2. Claims 1-4 are currently pending and have been examined.

Information Disclosure Statement

3. The Information Disclosure Statement filed on 23 May 2006 has been considered. An initialed copy of the Form 1449 is enclosed herewith.

Specification

4. The abstract of the disclosure is objected to because the abstract may not include other parts of the application or other material such as references to drawings. Correction is required. See MPEP § 608.01(b).

Claim Objections

5. Claim 1 is objected to because of the following informalities: *A detection apparatuses* on line 11 lacks noun/verb agreement. For examination purposes and per paragraph 0057 of the specification, "a" will be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
8. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. (US 5,777,565).

Examiner's Note: The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Claim 1:

Hayashi, as shown, discloses the following limitations:

A vehicle management system comprising:

- *a first and second gate provided at an entrance and exit of a toll road (see at least column 3, lines 25-32.)*
- *a communication terminal apparatus installed in a vehicle (see at least column 3, lines 24-25);*
- *detection apparatuses that are installed at the first through fourth gates, and, by performing radio communication with the vehicle that passes through the gates, detect the vehicle and times of passage through the gates (see at least column 3, lines 25-29; and*
- *a central control apparatus (see at least figure 2 and column 4, line 41) that calculates a toll according to a time during which the toll road is used excluding time spent at the rest stop, and a distance over which the toll road is used, based on the times of passage through the gates detected by the detection apparatuses (see at least column 3, lines 28-29.*

Hayashi does not disclose *a third and fourth gate provided at an entrance and exit of a rest stop, including a service area and parking area*. However, Hayashi discloses a gate at the entrance and the exit of a parking lot (see at least column 14, lines 20-21).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the toll road method of Hayashi with the parking lot method of Hayashi because if the charge applicable area is set as a[n] area or the like covering a wide range, it is necessary to install on-road devices at all the of the entries and exits (Kakihara et al., column 1, lines 53-55).

9. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi in view of Kakiyara et al. (US 6,959,282 B2).

Claim 2:

Hayashi et al. discloses the limitations as shown in the rejection of Claim 1 above. Hayashi et al. does not disclose the limitations of claim 2. However, Kakiyara, as shown discloses the following limitations:

- *wherein the central control apparatus calculates an average traveling speed of the vehicle from the time during which the toll road is used excluding the time spent at the rest stop and the distance over which the toll road is used (see at least column 30, lines 18-22), and*
- *notifies the police if a calculated average speed exceeds a predetermined speed (see at least column 19, lines 44-47; "...a member of the police forces with responsibility for the system who has stopped a vehicle whose display means is displaying an abnormality...").*

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Hayashi with the technique of Kakiyara because this would provide "the aims of automatically supervising the inability of a charging device mounted in a vehicle to perform charge processing, simplifying the exposing by a charge controller of vehicles that are unable to perform charge processing, and the simplifying of the collection by a controller of unpaid tolls." (Kakiyara et al, Column 30, lines 27-33).

Claim 4:

Hayashi et al. discloses the limitations as shown in the rejection of Claim 1 above. Hayashi et al. does not disclose the remaining limitations of claim 4. However, Kakiyara, as shown discloses the following limitations:

- *wherein the central control apparatus determines whether or not a vehicle has been parked continuously at the rest stop for a predetermined time or longer (see at least column 80, lines 50-55), and*
- *notifies the police if the vehicle has been parked for the predetermined time or longer (see at least column 19, lines 44-47; "...a member of the police forces with responsibility for the system who has stopped a vehicle whose display means is displaying an abnormality...").*

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Hayashi with the technique of Kakihara because "when the present invention is applied to such a parking lot, time of entry into the parking lot may be contained as parking information in the information which is exchanged between the on-vehicle device and the on-road device. Also, the invention may be applicable to a communication system for guiding vehicles or for providing vehicles with information as well as for collecting charges" (Hayashi et al. Column 16, lines 47-53).

10. Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. in view of Kakihara et al. further in view of Warkentin (US PGP 20020035421 A1).

Claim 3:

Hayashi et al. discloses the limitations as shown in the rejection of Claim 1 above. Hayashi et al. does not disclose the remaining limitations of claim 3. However, Kakihara, as shown, discloses the following limitations:

- *wherein the central control apparatus detects a vehicle whose continuous traveling time is greater than or equal to a predetermined time (see at least column 31, lines 40-44 and 47-48, The stopped vehicle and vehicle measurements {lines 47-48} equals the predetermined value {lines 40-44}),*

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Hayashi with the technique of Kakihara because this would provide “the aims of automatically supervising the inability of a charging device mounted in a vehicle to perform charge processing, simplifying the exposing by a charge controller of vehicles that are unable to perform charge processing, and the simplifying of the collection by a controller of unpaid tolls.” (Kakihara et al, Column 30, lines 27-33).

Hayashi et al. in view of Kakihara et al. discloses the limitations as shown in the rejection of Claim 3 above. Hayashi et al. in view of Kakihara et al. does not disclose the remaining limitations of claim 3. However, Warkentin, as shown, discloses the following limitations:

- *sends a rest advisory to a detected vehicle urging a driver to take a rest* (see at least paragraph 0011).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Hayashi et al. in view of Kakihara et al. with the technique of Warkentin “to reduce the number of traffic accidents and fatalities related to tired drivers failing asleep at the wheel” (Warkentin, paragraph 0004).

Conclusion

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **David J. Clark** whose telephone number is **571.270.3938**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **JAMES A. REAGAN** can be reached at **571.272.6710**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

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/David J Clark/
Examiner, Art Unit 4143
/JAMES A REAGAN/Supervisory Patent Examiner, Art Unit 4143